School Science and Mathematics 1992 Index

AUTHORS

Abell, S. K.; Pizzini, E. L.; Shepardson, D. P. The Questioning Level of Select Middle School Textbooks. February 1992, 74-79.

Alson, P. A Qualitative Approach to Sketch the Graph of a Function. April 1992, 182-187.

Amir-Moéz, A. R. Proper Values of Matrices and Some Applications. March 1992, 120-125.

Anderson, N. A.; Greabell, L. C. Applying Strategies From the Directed Reading Activity to a Directed Mathematics Activity. March 1992, 142-144.

Aslan, F.; Duck, H. The Real Number System vs. a System Called 10-adic. December 1992, 427-432.

Aslan, F.; Lamb, J. Jr.; Loe, M. An Analysis of the Morris Loe Angle Trisection Approximation. April 1992, 220-223.

Atwater, M. A.; Espinet, M.; Simmons, P. E. Career Decisions of K-12 Science Teachers: Factors Influencing Their Decisions and Perceptions Toward Science Teaching. February 1992, 84-91.

Austin, J. D. Graphing Statistical Functions. May/June 1992, 278-280.

Austin, J. D.; Converse, R. E.; Sass, R. L.; Tomlins, R. Coordinating Secondary School Science and Mathematics. February 1992, 64-68.

Barba, R. H.; Rubba, P. A. Procedural Task Analysis: A Tool for Science Edcation Problem-Solving Research. April 1992, 188-192.

Barman, C. R. An Evaluation of the Use of a Technique Designed to Assist Prospective Elementary Teachers Use the Learning Cycle with Science Textbooks. February 1992, 59-63.

Barrow, L. H.; Settlage, J., Jr. Recent Professional Productivity of the Authors of Elementary Science Textbook Series. December 1992, 446-449.

Bennett, J. P. Computers in Mathematics Education: A "Not Really for the Researcher" Review of Recent Unique Findings. January 1992, 38-39.

Berenson, S. B.; Carter, G.; Norwood, K. S. The At-Risk Student in College Developmental Algebra. February 1992, 55-58.

Berlin, D. F.; White, A. L. Report from the NSF/SSMA Wingspread Conference: A Network for Integrated Science and Mathematics Teaching and Learning. October 1992, 340-342.

Blum-Anderson, J. Increasing Enrollment in Higher-Level Mathematics Classes Through the Affective Domain. December 1992, 433-436.

Borchers, C. A.; Shroyer, M. G.; Enochs, L. G. A Staff Development Model to Encourage the Use of Microcomputers in Science Teaching in Rural Schools. November 1992, 384-391.

Brown, M. A.; Gray, M. W. Mathematics Text, Numerical, and Abstraction Anxieties and Their Relation to Elementary Teachers' Views on Preparing Students for the Study of Algebra. February 1992, 69-73.

Brown, S. Second-Grade Children's Understanding of the Division Process. February 1992, 92-95.

Cannon, J. R.; Jinks, J. A Cultural Literacy Approach to Assessing General Scientific Literacy. April 1992, 196-200.

Carter, G.; Norwood, K. S.; Berenson, S. B. The At-Risk Student in College Developmental Algebra. February 1992, 55-58.

Cherrington, A.; Duren, P. E. The Effects of Cooperative Group Work Versus Independent Practice on the Learning of Some Problem-Solving Strategies. February 1992, 80-83.

Cohen, H. G. Two Teaching Strategies: Their Effectiveness With Students of Varying Cognitive Abilities. March 1992, 126-132.

Converse, R. E.; Sass, R. L.; Tomlins, R.; Austin, J. D. Coordinating Secondary School Science and Mathematics. February 1992, 64-68.

Conwell, C. R.; Prichard, M. K. Expanding Students' Horizons in Mathematics and Science. May/June 1992, 267-272.

Cronin-Jones, L.; Shaw, E. L. Jr. The Influence of Methods Instruction on the Beliefs of Preservice Elementary and Secondary Science Teachers: Preliminary Comparative Analyses. January 1992, 14-22.

Cross, R. T.; Henze, J.; Price, R. F. Science Education for China's Elite Secondary Students: The Example of Chemistry. October 1992, 325-330.

Dick, T. P. Symbolic-Graphical Calculators: Teaching Tools for Mathematics. January 1992, 1-5.

Dockweiler, C. J.; Schielack, J. F. Elementary Mathematics and Calculators: Let's Think About It. November 1992, 392-398.

Duck, H.; Aslan, F. The Real Number System vs. a System Called 10-adic. December 1992, 427-432.

Duncan, D. R.; Litwiller, B. H. Differing Results From the Same Election Returns. February 1992, 99-101.

Duncan, D. R.; Litwiller, B. H. Prizes in Cereal Boxes: An Application of Probability. April 1992, 193-195.

Duren, P. E.; Cherrington, A. The Effects of Cooperative Group Work Versus Independent Practice on the Learning of Some Problem-Solving Strategies. February 1992, 80-83.

Easterday, K.; Smith. T. A Monte Carlo Application ot Approximate $\int_a^b e^{x^2} dx$. January 1992, 23-25.

Easterday, K. E.; Smith, T. A Survey of Mathematics Teacher Needs. April 1992, 212-219.

Eckstein, S. G.; Lazarowitz, R.; Shemesh, M. An Experimental Study of the Development of Formal Reasoning Among Secondary School Students. January 1992, 26-30.

Eisenberg, T.; Lowenthal, F. Mathematics Induction in School: An Illusion of Rigor. May/June 1992, 233-238.

Enochs, L. G.; Borchers, C. A.; Shroyer, M. G. A Staff Development Model to Encourage the Use of Microcomputers in Science Teaching in Rural Schools. November 1992, 384-391.

Espinet, M.; Simmons, P. E.; Atwater, M. A. Career Decisions of K-12 Science Teachers: Factors Influencing Their Decisions and Perceptions Toward Science Teaching. February 1992, 84-91.

Etchberger, M. A.; Shaw, K. L. Teacher Change as a Progression of Transitional Images: A Chronology of a Developing Constructivist Teacher. December 1992, 411-417.

Farrell, E.; Xu, J. Mathematics Performance of Shanghai High School Students: A Preliminary Look at Gender Differences in Another Culture. December 1992, 442-445.

Fyffe, D. W. Summary of the Annual Meeting and Board of Directors' Meetings--SSMA. January 1992, 5.

Fyffe, D. W. Summary of the Board of Directors' Meeting--SSMA. October 1992, 342.

Gardner, C. M.; Simmons, P. E.; Simpson, R. D. The Effects of CAI and Hands-On Activities on Elementary Students' Attitudes and Weather Knowledge. October 1992, 334-336.

Gifford, V. D.; Wiygul, S. M. The Effects of the Use of Outside Facilities and Resources on Success in Secondary School Science Fairs. March 1992, 116-119.

Gray, M. W.; Brown, M. A. Mathematics Text, Numerical, and Abstraction Anxieties and Their Relation to Elementary Teachers' Views on Preparing Students for the Study of Algebra. February 1992, 69-73.

Greabell, L. C.; Anderson, N. A. Applying Strategies From the Directed Reading Activity to a Directed Mathematics Activity. March 1992, 142-144.

Hadfield, O. D.; Martin, J. V.; Wooden, S. Mathematics Anxiety and Learning Style of the Navajo Middle School Student. April 1992, 171-176.

Hall, D. A. The Influence of an Innovative Activity-Centered Biology Program on Attitudes Toward Science Teaching Among Preservice Elementary Teachers. May/June 1992, 239-242.

Hamm, M. Achieving Scientific Literacy Through a Curriculum Connected with Mathematics and Technology. January 1992, 6-9.

Happs, J. C.; Mansfield, H. M. Using Grade Eight Students' Existing Knowledge to Teach About Parallet Lines. December 1992, 450-454.

Hendricksen, L. W.; Moore, J. M.; Mertens, T. R.; Hendrix, J. R. Can Using Human Examples Facilitate Learning Mendelian Genetics Concepts? May/June 1992, 273-277.

Hendrix, J. R.; Hendricksen, L. W.; Moore, J. M.; Mertens, T. R. Can Using Human Examples Facilitate Learning Mendelian Genetics Concepts? May/June 1992, 273-277.

Henze, J.; Price, R. F.; Cross, R. T. Science Education for China's Elite Secondary Students: The Example of Chemistry. October 1992, 325-330.

Hill, D. M.; Tuovinen, J. E. Towards Better Strategies for Thinking and Programming. April 1992, 206-211.

Hughes, K.; Murphy, A.; Kelter, P. Science Outreach for the 1990s. November 1992, 365-369.

Janvier, C.; Preece, J. A Study of the Interpretation of Trends in Multiple Curve Graphs of Ecological Situations. October 1992, 299-306.

Jinks, J.; Cannon, J. R. A Cultural Literacy Approach to Assessing General Scientific Literacy. April 1992, 196-200.

Kelter, P.; Hughes, K.; Murphy, A. Science Outreach for the 1990s. November 1992, 365-369.

Klein, P. A. The Scenario: A Catalyst in Implementing the *Curriculum and Evaluation Standards for School Mathematics*. October 1992, 337-339.

Kloosterman, P. Non-Routine Word Problems: One Part of a Problem-Solving Program in the Elementary School. January 1992, 31-37.

Kloosterman, P.; Stage, F. K. Measuring Beliefs About Mathematical Problem Solving. March 1992, 109-115.

Lamb, H. L.; Park, J. C. Video Vignettes: A Look at Physics in the Movies. May/June 1992, 257-262.

Lamb, J. Jr.; Loe, M.; Aslan, F. An Analysis of the Morris Loe Angle Trisection Approximation. April 1992, 220-223.

Lazarowitz, R.; Shemesh, M.; Eckstein, S. G. An Experimental Study of the Development of Formal Reasoning Among Secondary School Students. January 1992, 26-30.

Litwiller, B. H.; Duncan, D. R. Differing Results From the Same Election Returns. February 1992, 99-101.

Litwiller, B. H.; Duncan, D. R. Prizes in Cereal Boxes: An Application of Probability. April 1992, 193-195.

Loe, M.; Aslan, F.; Lamb, J. Jr. An Analysis of the Morris Loe Angle Trisection Approximation. April 1992, 220-223.

Lowenthal, F.; Eisenberg, T. Mathematics Induction in School: An Illusion of Rigor. May/June 1992, 233-238.

Mansfield, H. M.; Happs, J. C. Using Grade Eight Students' Existing Knowledge to Teach About Parallet Lines. December 1992, 450-454.

Martens, M. L. Inhibitors to Implementing a Problem-Solving Approach to Teaching Elementary Science: Case Study of a Teacher in Change. March 1992, 150-156.

Martin, J. V.; Wooden, S.; Hadfield, O. D. Mathematics Anxiety and Learning Style of the Navajo Middle School Student. April 1992, 171-176.

Mason, E.; Zollman, A. The *Standards*' Beliefs Instrument (SBI): Teachers' Beliefs About the NCTM *Standards*. November 1992, 359-364.

Mathews, J. H. Sequences, Series, and *Mathematica*. October 1992, 318-324.

Mayes, R. L. The Effects of Using Software Tools on

Mathematical Problem Solving in Secondary Schools. May/June 1992, 243-248.

McLellan, H.; Scharmann, L. C. Enhancing Science-Technology-Society (STS) Instruction: An Examination of Teacher Goal Orientations. May/June 1992, 249-252.

Meconi, L. J. Numbers, Counting, and Infinity in Middle School Mathematics. November 1992, 381-383.

Meichtry, Y. J. Using Laboratory Experiences to Develop the Scientific Literacy of Middle School Students. December 1992, 437-441.

Mertens, T. R.; Hendrix, J. R.; Hendricksen, L. W.; Moore, J. M. Can Using Human Examples Facilitate Learning Mendelian Genetics Concepts? May/June 1992, 273-277.

Moore, J. M.; Mertens, T. R.; Hendrix, J. R.; Hendricksen, L. W. Can Using Human Examples Facilitate Learning Mendelian Genetics Concepts? May/June 1992, 273-277.

Morrell, P. D. The Effects of Computer Assisted Instruction on Student Achievement in High School Biology. April 1992, 177-181.

Murphy, A.; Kelter, P.; Hughes, K. Science Outreach for the 1990s. November 1992, 365-369.

Norwood, K. S.; Berenson, S. B.; Carter, G. The At-Risk Student in College Developmental Algebra. February 1992, 55-58.

O'Brien, T. Science Inservice Workshops That Work for Elementary Teachers. December 1992, 422-426.

Park, J. C.; Lamb, H. L. Video Vignettes: A Look at Physics in the Movies. May/June 1992, 257-262.

Pederson, J. E. The Effects of a Cooperative Controversy, Presented as an STS Issue, on Achievement and Science Anxiety in Secondary Science. November 1992, 374-380.

Pizzini, E. L.; Shepardson, D. P.; Abell, S. K. The Questioning Level of Select Middle School Textbooks. February 1992, 74-79.

Price, R. F.; Cross, R. T.; Henze, J. Science Education for China's Elite Secondary Students: The Example of Chemistry. October 1992, 325-330.

Prichard, M. K.; Conwell, C. R. Expanding Students' Horizons in Mathematics and Science. May/June 1992, 267-272.

Preece, J.; Janvier, C. A Study of the Interpretation of Trends in Multiple Curve Graphs of Ecological Situations. October 1992, 299-306.

Proudfit, L. Questioning in the Elementary Mathematics Classroom. March 1992, 133-135.

Reesal, M. R.; Sahai, H. Teaching Elementary Probability and Statistics, Some Applications in Epidemiology. March 1992, 145-149.

Robertson, D. F. An Application of Cartesian Graphing to Seismic Exploration. January 1992, 10-13.

Rokusek, T.; Stefanich, G. P. An Analysis of Computational Errors in the Use of Division Algorithms by Fourth-Grade Students. April 1992, 201-205.

Roth, W. M. Bridging the Gap Between School and Real Life: Toward an Integration of Science, Mathematics, and Technology in the Context of Authentic Practice. October 1992, 307-317.

Rubba, P. A.; Barba, R. H. Procedural Task Analysis: A Tool for Science Education Problem-Solving Research. April 1992, 188-192.

Sahai, H.; Reesal, M. R. Teaching Elementary Probability and Statistics, Some Applications in Epidemiology. March 1992, 145-149.

Sass, R. L.; Tomlins, R.; Austin, J. D.; Converse, R. E. Coordinating Secondary School Science and Mathematics. February 1992, 64-68.

Saunders, W. L. The Constructivist Perspective: Implications and Strategies for Science. March 1992, 136-141.

Scharmann, L. C.; McLellan, H. Enhancing Science-Technology-Society (STS) Instruction: An Examination of Teacher Goal Orientations. May/June 1992, 249-252.

Schielack, J. F.; Dockweiler, C. J. Elementary Mathematics and Calculators: Let's Think About It. November 1992, 392-398.

Settlage, J., Jr.; Barrow, L. H. Recent Professional Productivity of the Authors of Elementary Science Textbook Series. December 1992, 446-449.

Shaw, E. L., Jr.; Cronin-Jones, L. The Influence of Methods Instruction on the Beliefs of Preservice Elementary and Secondary Science Teachers: Preliminary Comparative Analyses. January 1992, 14-22.

Shaw, K. L.; Etchberger, M. A. Teacher Change as a Progression of Transitional Images: A Chronology of a Developing Constructivist Teacher. December 1992, 411-417.

Shemesh, M.; Eckstein, S. G.; Lazarowitz, R. An Experimental Study of the Development of Formal Reasoning Among Secondary School Students. January 1992, 26-30.

Shepardson, D. P.; Abell, S. K.; Pizzini, E. L. The Questioning Level of Select Middle School Textbooks. February 1992, 74-79.

Shroyer, M. G.; Enochs, L. G.; Borchers, C. A. A Staff Development Model to Encourage the Use of Microcomputers in Science Teaching in Rural Schools. November 1992, 384-391.

Simmons, P. E.; Atwater, M. A.; Espinet, M. Career Decisions of K-12 Science Teachers: Factors Influencing Their Decisions and Perceptions Toward Science Teaching. February 1992, 84-91.

Simmons, P. E.; Simpson, R. D.; Gardner, C. M. The Effects of CAI and Hands-On Activities on Elementary Students' Attitudes and Weather Knowledge. October 1992, 334-336.

Simpson, R. D.; Gardner, C. M.; Simmons, P. E. The Effects of CAI and Hands-On Activities on Elementary Students' Attitudes and Weather Knowledge. October 1992, 334-336.

Smith, T.; Easterday, K. A Monte Carlo Application ot Approximate $\int_a^b e^{x^2} dx$. January 1992, 23-25.

Smith, T.; Easterday, K. E. A Survey of Mathematics Teacher

Needs. April 1992, 212-219.
Stage, F. K.; Kloosterman, P. Measuring Beliefs About Mathematical Problem Solving. March 1992, 109-115.
Stavy, R.; Tirosh, D. Students' Ability to Confine Their Application of Knowledge: The Case of Mathematics and Science. November 1992, 353-358.
Stefanich, G. P.; Rokusek, T. An Analysis of Computational Errors in the Use of Division Algorithms by Fourth-Grade Students. April 1992, 201-205.
Taback, S. F. Enhancing the Teaching of Mathematical Problem Solving. May/June 1992, 253-256.
Tirosh, D.; Stavy, R. Students' Ability to Confine Their Application of Knowledge: The Case of Mathematics and Science. November 1992, 353-358.
Tomlins, R.; Austin, J. D.; Converse, R. E.; Sass, R. L. Coordinating Secondary School Science and Mathematics. February 1992, 64-68.
Tuovinen, J. E.; Hill, D. M. Towards Better Strategies for Thinking and Programming. April 1992, 206-211.
Vance, J. H. Understanding Equivalence: A Number by Any Other Name. May/June 1992, 263-266.
Van Devender, E. M. Helping Students Acquire Thinking Skills Through Mathematics Instruction. October 1992, 331-333.
Wallace, E. C. Evaluating Cross-Country Scores (Nonparametrically). November 1992, 370-373.
Wandersee, J. E. Exploring Human Growth: Using a Calculator to Integrate Mathematics and Science. February 1992, 96-98.
Wesson, J. B. The Kramer Story: Implementation of a Revised Primary Mathematics Program. December 1992, 418-421.
White, A. L.; Berlin, D. F. Report from the NSF/SSMA Wingspread Conference: A Network for Integrated Science and Mathematics Teaching and Learning. October 1992, 340-342.
Wiles, C. A. Investigating Gender Bias in the Evaluations of Middle School Teachers of Mathematics. October 1992, 295-298.
Wooden, S.; Hadfield, O. D.; Martin, J. V. Mathematics Anxiety and Learning Style of the Navajo Middle School Student. April 1992, 171-176.
Wiygul, S. M.; Gifford, V. D. The Effects of the Use of Outside Facilities and Resources on Success in Secondary School Science Fairs. March 1992, 116-119.
Xu, J.; Farrell, E. Mathematics Performance of Shanghai High School Students: A Preliminary Look at Gender Differences in Another Culture. December 1992, 442-445.
Zollman, A.; Mason, E. The *Standards*' Beliefs Instrument (SBI): Teachers' Beliefs About the NCTM *Standards*. November 1992, 359-364.

ARTICLES

A Cultural Literacy Approach to Assessing General Scientific Literacy. Cannon, J. R.; Jinks, J. April 1992, 196-200.
A Monte Carlo Application to Approximate $\int_a^b e^{x^2} dx$ Easterday, K.; Smith, T. January 1992, 23-25.
A Qualitative Approach to Sketch the Graph of a Function. Alson, P. April 1992, 182-187.
A Staff Development Model to Encourage the Use of Microcomputers in Science Teaching in Rural Schools. Borchers, C. A.; Shroyer, M. G.; Enochs, L. G. November 1992, 384-391.
A Study of the Interpretation of Trends in Multiple Curve Graphs of Ecological Situations. Preece, J.; Janvier, C. October 1992, 299-306.
A Survey of Mathematics Teacher Needs. Easterday, K. E.; Smith, T. April 1992, 212-219.
Achieving Scientific Literacy Through a Curriculum Connected with Mathematics and Technology. Hamm, M. January 1992, 6-9.
An Analysis of Computational Errors in the Use of Division Algorithms by Fourth-Grade Students. Stefanich, G. P.; Rokusek, T. April 1992, 201-205.
An Analysis of the Morris Loe Angle Trisection Approximation. Aslan, F.; Lamb, J. Jr.; Loe, M. April 1992, 220-223.
An Application of Cartesian Graphing to Seismic Exploration. Robertson, D. F. January 1992, 10-13.
An Experimental Study of the Development of Formal Reasoning Among Secondary School Students. Shemesh, M.; Eckstein, S. G.; Lazarowitz, R. January 1992, 26-30.
An Evaluation of the Use of a Technique Designed to Assist Prospective Elementary Teachers Use the Learning Cycle with Science Textbooks. Barman, C. R. February 1992, 59-63.
Applying Strategies From the Directed Reading Activity to a Directed Mathematics Activity. Greabell, L. C.; Anderson, N. A. March 1992, 142-144.
Bridging the Gap Between School and Real Life: Toward an Integration of Science, Mathematics, and Technology in the Context of Authentic Practice. Roth, W. M. October 1992, 307-317.
Can Using Human Examples Facilitate Learning Mendelian Genetics Concepts? Moore, J. M.; Mertens, T. R.; Hendrix, J. R.; Hendricksen, L. W. May/June 1992, 273-277.
Career Decisions of K-12 Science Teachers: Factors Influencing Their Decisions and Perceptions Toward Science Teaching. Espinet, M.; Simmons, P. E.; Atwater, M. A. February 1992, 84-91.
Computers in Mathematics Education: A "Not Really for the Researcher" Review of Recent Unique Findings. Bennett, J. P. January 1992, 38-39.
Coordinating Secondary School Science and Mathematics. Austin, J. D.; Converse, R. E.; Sass, R. L.; Tomlins, R. February 1992, 64-68.
Differing Results From the Same Election Returns. Litwiller, B. H.; Duncan, D. R. February 1992, 99-101.
Elementary Mathematics and Calculators: Let's Think About It. Schielack, J. F.; Dockweiler, C. J. November 1992, 392-

398.

Enhancing Science-Technology-Society (STS) Instruction: An Examination of Teacher Goal Orientations. Scharmann, L. C.; McLellan, H. May/June 1992, 249-252.

Enhancing the Teaching of Mathematical Problem Solving. Taback, S. F. May/June 1992, 253-256.

Evaluating Cross-Country Scores (Nonparametrically). Wallace, E. C. November 1992, 370-373.

Expanding Students' Horizons in Mathematics and Science. Conwell, C. R.; Prichard, M. K. May/June 1992, 267-272.

Exploring Human Growth: Using a Calculator to Integrate Mathematics and Science. Wandersee, J. E. February 1992, 96-98.

Graphing Statistical Functions. Austin, J. D. May/June 1992, 278-280.

Helping Students Acquire Thinking Skills Through Mathematics Instruction. Van Devender, E. M. October 1992, 331-333.

Increasing Enrollment in Higher-Level Mathematics Classes Through the Affective Domain. Blum-Anderson, J. December 1992, 433-436.

Inhibitors to Implementing a Problem-Solving Approach to Teaching Elementary Science: Case Study of a Teacher in Change. Martens, M. L. March 1992, 150-156.

Investigating Gender Bias in the Evaluations of Middle School Teachers of Mathematics. Wiles, C. A. October 1992, 295-298.

Mathematics Anxiety and Learning Style of the Navajo Middle School Student. Hadfield, O. D.; Martin, J. V.; Wooden, S. April 1992, 171-176.

Mathematics Induction in School: An Illusion of Rigor. Lowenthal, F.; Eisenberg, T. May/June 1992, 233-238.

Mathematics Performance of Shanghai High School Students: A Preliminary Look at Gender Differences in Another Culture. Xu, J.; Farrell, E. December 1992, 442-445.

Mathematics Text, Numerical, and Abstraction Anxieties and Their Relation to Elementary Teachers' Views on Preparing Students for the Study of Algebra. Brown, M. A.; Gray, M. W. February 1992, 69-73.

Measuring Beliefs About Mathematical Problem Solving. Kloosterman, P.; Stage, F. K. March 1992, 109-115.

Non-Routine Word Problems: One Part of a Problem-Solving Program in the Elementary School. Kloosterman, P. January 1992, 31-37.

Numbers, Counting, and Infinity in Middle School Mathematics. Meconi, L. J. November 1992, 381-383.

Prizes in Cereal Boxes: An Application of Probability. Litwiller, B. H.; Duncan, D. R. April 1992, 193-195.

Procedural Task Analysis: A Tool for Science Education Problem-Solving Research. Barba, R. H.; Rubba, P. A. April 1992, 188-192.

Proper Values of Matrices and Some Applications. Amir-Moéz, A. R. March 1992, 120-125.

Questioning in the Elementary Mathematics Classroom. Proudfit, L. March 1992, 133-135.

Recent Professional Productivity of the Authors of Elementary Science Textbook Series. Settlage, J., Jr.; Barrow, L. H. December 1992, 446-449.

Report from the NSF/SSMA Wingspread Conference: A Network for Integrated Science and Mathematics Teaching and Learning. Berlin, D. F.; White, A. L. October 1992, 340-342.

Science Education for China's Elite Secondary Students: The Example of Chemistry. Cross, R. T.; Henze, J.; Price, R. F. October 1992, 325-330.

Science Inservice Workshops That Work for Elementary Teachers. O'Brien, T. December 1992, 422-426.

Science Outreach for the 1990s. Kelter, P.; Hughes, K.; Murphy, A. November 1992, 365-369.

Second-Grade Children's Understanding of the Division Process. Brown, S. February 1992, 92-95.

Sequences, Series, and *Mathematica*. Mathews, J. H. October 1992, 318-324.

Students' Ability to Confine Their Application of Knowledge: The Case of Mathematics and Science. Tirosh, D.; Stavy, R. November 1992, 353-358.

Summary of the Annual Meeting and Board of Directors' Meetings--SSMA. Fyffe, D. W. January 1992, 5.

Summary of the Board of Directors' Meeting--SSMA. Fyffe, D. W. October 1992, 342.

Symbolic-Graphical Calculators: Teaching Tools for Mathematics. Dick, T. P. January 1992, 1-5.

Teacher Change as a Progression of Transitional Images: A Chronology of a Developing Constructivist Teacher. Etchberger, M. A.; Shaw, K. L. December 1992, 411-417.

Teaching Elementary Probability and Statistics, Some Applications in Epidemiology. Sahai, H.; Reesal, M. R. March 1992, 145-149.

The At-Risk Student in College Developmental Algebra. Carter, G.; Norwood, K. S.; Berenson, S. B. February 1992, 55-58.

The Constructivist Perspective: Implications and Strategies for Science. Saunders, W. L. March 1992, 136-141.

The Effects of a Cooperative Controversy, Presented as an STS Issue, on Achievement and Science Anxiety in Secondary Science. Pederson, J. E. November 1992, 374-380.

The Effects of CAI and Hands-On Activities on Elementary Students' Attitudes and Weather Knowledge. Gardner, C. M.; Simmons, P. E.; Simpson, R. D. October 1992, 334-336.

The Effects of Computer Assisted Instruction on Student Achievement in High School Biology. Morrell, P. D. April 1992, 177-181.

The Effects of Cooperative Group Work Versus Independent Practice on the Learning of Some Problem-Solving Strategies. Duren, P. E.; Cherrington, A. February 1992, 80-83.

The Effects of the Use of Outside Facilities and Resources on Success in Secondary School Science Fairs. Gifford, V. D.; Wiygul, S. M. March 1992, 116-119.

The Effects of Using Software Tools on Mathematical Problem Solving in Secondary Schools. Mayes, R. L. May/June 1992, 243-248.

The Influence of an Innovative Activity-Centered Biology Program on Attitudes Toward Science Teaching Among Preservice Elementary Teachers. Hall, D. A. May/June 1992, 239-242.

The Influence of Methods Instruction on the Beliefs of Preservice Elementary and Secondary Science Teachers: Preliminary Comparative Analyses. Cronin-Jones, L.; Shaw, E. L. Jr. January 1992, 14-22.

The Kramer Story: Implementation of a Revised Primary Mathematics Program. Wesson, J. B. December 1992, 418-421.

The Questioning Level of Select Middle School Textbooks. Pizzini, E. L.; Shepardson, D. P.; Abell, S. K. February 1992, 74-79.

The Real Number System vs. a System Called 10-adic. Aslan, F.; Duck, H. December 1992, 427-432.

The Scenario: A Catalyst in Implementing the *Curriculum and Evaluation Standards for School Mathematics*. Klein, P. A. October 1992, 337-339.

The *Standards*' Beliefs Instrument (SBI): Teachers' Beliefs About the NCTM *Standards*. Zollman, A.; Mason, E. November 1992, 359-364.

Towards Better Strategies for Thinking and Programming. Tuovinen, J. E.; Hill, D. M. April 1992, 206-211.

Two Teaching Strategies: Their Effectiveness With Students of Varying Cognitive Abilities. Cohen, H. G. March 1992, 126-132.

Understanding Equivalence: A Number by Any Other Name. Vance, J. H. May/June 1992, 263-266.

Using Grade Eight Students' Existing Knowledge to Teach About Parallel Lines. Mansfield, H. M.; Happs, J. C. December 1992, 450-454.

Using Laboratory Experiences to Develop the Scientific Literacy of Middle School Students. Meichtry, Y. J. December 1992, 437-441.

Video Vignettes: A Look at Physics in the Movies. Park, J. C.; Lamb, H. L. May/June 1992, 257-262.

DEPARTMENTS

SSMILES

Rule, A. C. March 1992, 157-162.

Whitmer, J. C. January 1992, 40-44.

EARLY DAYS

Oliver, J. S. January 1992, 45-46.

Oliver, J. S. February 1992,102-103.

Oliver, J. S. March 1992, 163-164.

Oliver, J. S. April 1992, 224-225.

Oliver, J. S. May/June 1992, 285-286.

Oliver, J. S. October 1992, 343-344.

Oliver, J. S. November 1992, 399-400.

Oliver, J. S. December 1992, 461-462.

SOFTWARE REVIEWS

Erickson, D. K. Geometric Connectors: Transformation. October 1992, 345.

Heaton, J. D. SimAnt. October 1992, 345-346.

Henderson, B. Balance of the Planet. November 1992, 401.

Hogue, L. Interactive NOVA: Animal Pathfinders. April 1992, 226-227.

McGrath, D. Wetlands Project. April 1992, 227.

Nichols, R. Super Solvers Outnumbered. January 1992, 47.

Swearingen, R. SimEarth. January 1992, 47-48.

Viner, M. The Wetlands. November 1992, 401-402.

Wilson, J. D. MacFrog. December 1992, 463-464.

BOOK REVIEWS

Barrow, L. H. Earthquake. October 1992, 348.

Cook, J. Exploring the Microscopic World. November 1992, 403-404.

Daisey, P. What Neat Feet. April 1992, 228.

Daisey, P. When the Woods Hum. March 1992, 165.

Ellis, J. D. The Computer in the Science Curriculum. May/June 1992, 287-288.

Govindarajan, G. Ants. February 1992, 104.

Govindarajan, G. The Insect Almanac: A Year-Round Activity Guide. October 1992, 347-348.

Lumpe, A. T. Safety in School Science Labs. January 1992, 49.

Oviatt, C. G. Earth Science for Every Kid: 101 Easy Experiments That Really Work. April 1992, 228.

Ramey-Gassert, L. A History of Ideas in Science Education: Implications for Practice. November 1992, 403.

Ramey-Gassert, L. Women in the Field: America's Pioneering Women Naturalists. May/June 1992, 288.

Speer, W. R. Books You Can Count On: Linking Mathematics & Literature. October 1992, 347.

Swearingen, R. Slippery Babies: Young Frogs, Toads, and Salamanders. March 1992, 165.

PROBLEMS

Gibbs, R. A.; Szücs, L. January 1992, 50-54.

Gibbs, R. A.; Szücs, L. February 1992, 105-108.

Gibbs, R. A.; Szücs, L. March 1992, 166-170.

Gibbs, R. A.; Szücs, L. April 1992, 229-232.

Gibbs, R. A.; Szücs, L. May/June 1992, 289-294.

Gibbs, R. A.; Szücs, L. October 1992, 349-352.

Gibbs, R. A.; Szücs, L. November 1992, 405-410.

Gibbs, R. A.; Szücs, L. December 1992, 465-468.

THIS PERIODICAL MAY BE COPYRIGHTED, IN
WHICH CASE THE CONTENTS REMAIN THE PROPERTY
OF THE COPYRIGHT OWNER. THE MICROFORM
EDITION IS REPRODUCED BY AGREEMENT WITH
THE PUBLISHER. DUPLICATION OR RESALE WITHOUT
PERMISSION IS PROHIBITED.

UNIVERSITY MICROFILMS INTERNATIONAL,
ANN ARBOR, MICHIGAN